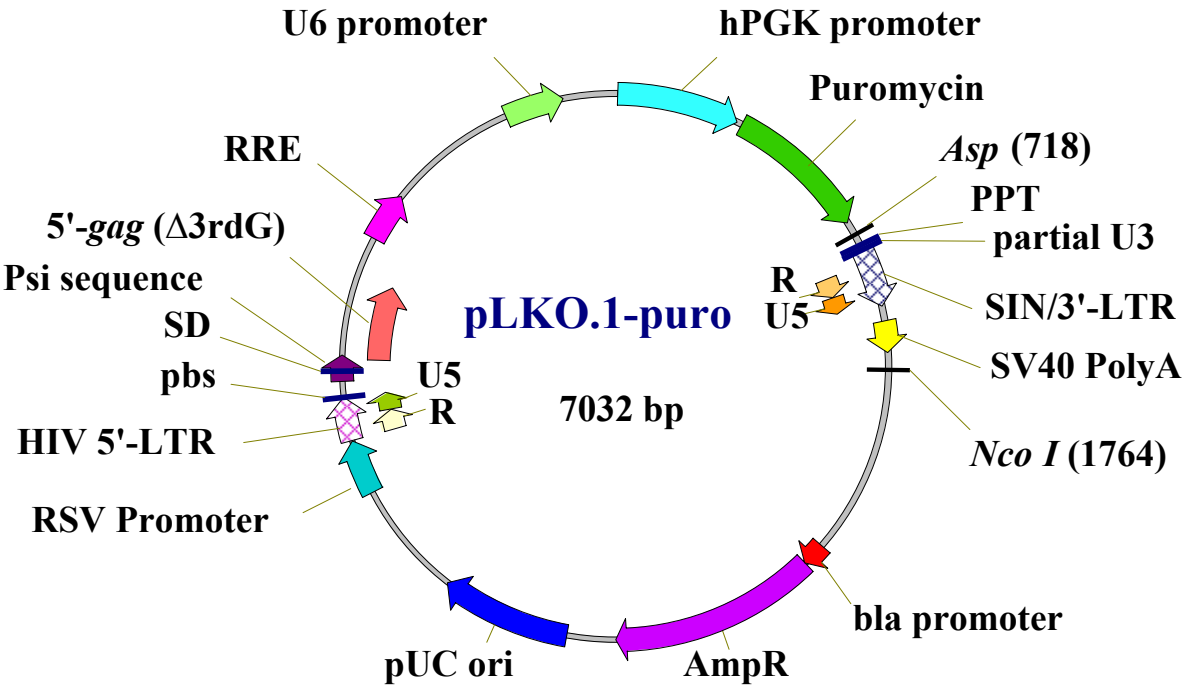

Description:

pLKO.1-Puro is a cloning vector of shRNA, originally derived from HIV-1. It contains all the necessary *cis*-elements for packaging, reverse transcription, and integration for subsequent production of the lentiviral particles.

Cloning site:

*Age*I and *Eco*RI (only these two sites available)

Location of features:

- Human posphoglycerate kinase (hPGK) promoter: 1-507
- Puromycin: 529-1128
- Poly purine track (PPT): 1234-1247
- Partial U3: 1255-1308
- 3' self inactivating long terminal repeat (SIN/3'-LTR) : 1255-1499
- R: repeat sequence 1309-1406
- U5': 1407-1489
- SV40 polyA: 1561-1691
- bla promoter: 2551-2649
- Ampicillin resistance (AmpR): 2650-3507
- pUC origin of replication (pUC ori): 3711-4251
- RSV promoter: 4736-4964
- HIV 5' long terminal repeat (HIV 5'-LTR): 4965-5145
- Primer binding site (pbs): 5147-5164
- Splice donor site (SD): 5255
- RNA packaging signal (Psi) sequence: 5212-5320
- 5'-*gag* (Δ 3rdG): 5303-5653. Sequence of 5'-end *gag* gene of HIV-1 in which the 3rd G of ATG initiation coden was deleted resulting in no expression of Gag.
- Rev response element (RRE): 5821-6025
- U6 promoter: 6572-6819

Note:

- Bacterial resistance: Ampicillin
- Mammalian selectable markers: Puromycin
- Eukaryotic promoter: hPGK promoter, RSV promoter, U6 promoter
- Prokaaryotic promoter: bla promoter